

IN THE CLAIMS:

Claims 2-6 and 16-23 were previously canceled. Claim 26 has been amended herein. All of the pending claims 1 through 48 are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

Listing of Claims:

1. (previously presented) A melt-pourable explosive composition comprising: 30 weight percent to 70 weight percent of an organic binder comprising 2,4-dinitroanisole; 5 weight percent to 35 weight percent of at least one oxidizer; and 5 weight percent to 35 weight percent of at least one reactive metallic fuel, wherein the melt-pourable explosive composition is pourable at a temperature in a range of 80° C to 115° C.

Claims 2-6 (canceled)

7. (previously presented) The melt-pourable explosive composition of claim 1, further comprising an N-alkyl-nitroaniline processing aid.

8. (previously presented) The melt-pourable explosive composition of claim 1, further comprising N-methyl-nitroaniline as a processing aid.

9. (previously presented) The melt-pourable explosive composition of claim 1, further comprising at least one processing aid selected from the group consisting of N-alkyl nitroaniline and N-aryl-nitroaniline, the at least one processing aid accounting for not more than 1 weight percent of the melt-pourable explosive composition.

10. (previously presented) The melt-pourable explosive composition of claim 1, wherein the at least one reactive metallic fuel comprises aluminum.

11. (previously presented) The melt-pourable explosive composition of claim 1, wherein the melt-pourable explosive composition undergoes an onset of thermal decomposition at a temperature that is at least 55.5° C higher than the temperature at which the melt-pourable explosive composition becomes pourable.

12. (previously presented) The melt-pourable explosive composition of claim 1, wherein the melt-pourable explosive composition exhibits a card gap value of less than 105.

13. (previously presented) The melt-pourable explosive composition of claim 1, wherein the melt-pourable explosive composition exhibits a card gap value of less than 85.

14. (previously presented) The melt-pourable explosive composition of claim 1, wherein the melt-pourable explosive composition has a total energy of detonation of 11.6 kJ/cc to 14.2 kg/cc.

15. (previously presented) A melt-pourable explosive composition comprising:
30 weight percent to 70 weight percent of an organic binder comprising 2,4-dinitroanisole;
5 weight percent to 35 weight percent of at least one inorganic oxidizer; and
5 weight percent to 35 weight percent of at least one reactive metallic fuel, wherein the
melt-pourable explosive composition is pourable at a temperature in a range of 80° C to 115° C.

Claims 16-23 (canceled)

24. (previously presented) The melt-pourable explosive composition of claim 15, further comprising an N-alkyl-nitroaniline processing aid.

25. (previously presented) The melt-pourable explosive composition of claim 15, further comprising N-methyl-nitroaniline as a processing aid.

26. (currently amended) The melt-pourable explosive composition of claim 15, wherein the ~~one or more organic binders comprise~~ organic binder further comprises an N-aryl-nitroaniline ~~processing aid~~.

27. (previously presented) The melt-pourable explosive composition of claim 15, further comprising at least one processing aid selected from the group consisting of N-alkyl nitroaniline and N-aryl-nitroaniline, the at least one processing aid accounting for not more than 1 weight percent of the melt-pourable explosive composition.

28. (previously presented) The melt-pourable explosive composition of claim 15, wherein the at least one inorganic oxidizer comprises at least one member selected from the group consisting of perchlorates and nitrates.

29. (previously presented) The melt-pourable explosive composition of claim 15, wherein the at least one inorganic oxidizer comprises at least one perchlorate selected from the group consisting of ammonium perchlorate, sodium perchlorate, and potassium perchlorate.

30. (withdrawn) The melt-pourable explosive composition of claim 15, wherein the one or more inorganic oxidizers comprise at least one nitrate selected from the group consisting of ammonium nitrate, sodium nitrate, strontium nitrate, and potassium nitrate.

31. (previously presented) The melt-pourable explosive composition of claim 15, wherein the at least one inorganic oxidizer has an average particle size of 3 microns to 60 microns.

32. (previously presented) The melt-pourable explosive composition of claim 15, wherein the at least one inorganic oxidizer has an average particle size of 5 microns to 20 microns.

33. (previously presented) The melt-pourable explosive composition of claim 15, wherein at least 95 weight percent of the melt-pourable explosive composition comprises a combination of the organic binder, the at least one inorganic oxidizer, and the at least one reactive metallic fuel.

34. (previously presented) The melt-pourable explosive composition of claim 15, wherein at least 99 weight percent of the melt-pourable explosive composition comprises a combination of the organic binder, the at least one inorganic oxidizer, and the at least one reactive metallic fuel.

35. (previously presented) The melt-pourable explosive composition of claim 15, wherein the at least one reactive metallic fuel comprises aluminum.

36. (previously presented) The melt-pourable explosive composition of claim 15, wherein the melt-pourable explosive composition undergoes an onset of thermal decomposition at a temperature that is at least 55.5° C higher than the temperature at which the melt-pourable explosive composition becomes pourable.

37. (previously presented) The melt-pourable explosive composition of claim 15, wherein the melt-pourable explosive composition exhibits a card gap value of less than 105.

38. (previously presented) The melt-pourable explosive composition of claim 15, wherein the melt-pourable explosive composition exhibits a card gap value of less than 85.

39. (previously presented) The melt-pourable explosive composition of claim 15, wherein the melt-pourable explosive composition exhibits a dent depth in a range of 0.713 cm to 0.872 cm.

40. (previously presented) The melt-pourable explosive composition of claim 15, wherein the melt-pourable explosive composition has a total energy of detonation of 11.6 kJ/cc to 14.2 kg/cc.

41. (previously presented) A melt-pourable explosive composition comprising: 30 weight percent to 70 weight percent of an organic binder comprising 2,4-dinitroanisole; 5 weight percent to 35 weight percent of at least one inorganic oxidizer; and 5 weight percent to 35 weight percent of at least one reactive metallic fuel, wherein the melt-pourable explosive composition is melt-pourable at a temperature in a range of 80° C to 115° C, undergoes an onset of thermal decomposition at a temperature that is at least 55.5° C higher than the temperature at which the melt-pourable explosive composition becomes pourable, and exhibits a card gap value of less than 105, a dent depth in a range of 0.713 cm to 0.872 cm, and a total energy of detonation of 11.6 kJ/cc to 14.2 kJ/cc.

42. (previously presented) The melt-pourable explosive composition of claim 41, wherein the card gap value exhibited by the melt-pourable explosive composition is less than 85.

43. (previously presented) The melt-pourable explosive composition of claim 1, wherein the at least one oxidizer comprises an inorganic oxidizer present in the melt-pourable explosive composition in a single modal particle size distribution in a range of 5 microns to 50 microns, the inorganic oxidizer constituting from 15 weight percent to 20 weight percent of the melt-pourable explosive composition.

44. (previously presented) The melt-pourable explosive composition of claim 15, wherein the at least one inorganic oxidizer is present in the melt-pourable explosive composition in a single modal particle size distribution in a range of 5 microns to 50 microns, the at least one inorganic oxidizer constituting from 15 weight percent to 20 weight percent of the melt-pourable explosive composition.

45. (previously presented) The melt-pourable explosive composition of claim 41, wherein the at least one inorganic oxidizer comprises an inorganic oxidizer present in the melt-pourable explosive composition in a single modal particle size distribution in a range of 5 microns to 50 microns, the inorganic oxidizer constituting from 15 weight percent to 20 weight percent of the melt-pourable explosive composition.

46. (previously presented) The melt-pourable explosive composition of claim 1, wherein the at least one oxidizer comprises ammonium perchlorate.

47. (previously presented) The melt-pourable explosive composition of claim 15, wherein the at least one inorganic oxidizer comprises ammonium perchlorate.

48. (previously presented) The melt-pourable explosive composition of claim 41, wherein the at least one inorganic oxidizer comprises ammonium perchlorate.